

Fig. 1

FIG. 2 is a block diagram of a Switch Protocol Controller (SPC) 200. The SPC 200 includes a Receive Controller 201, a Decoder 202, a Header Processor 203, a Frame Buffer 204, a Processor 207, an Equivalent Port Table 209, a Label Table 208, a Transmitter Controller 205, and an Arbitrator 206. The SPC 200 is connected to an Arbitration Bus 200 and a To/from Crosspoint Switch. The input of the SPC 200 is connected to the Receive Controller 201, and the output is connected to the Transmitter Controller 205.

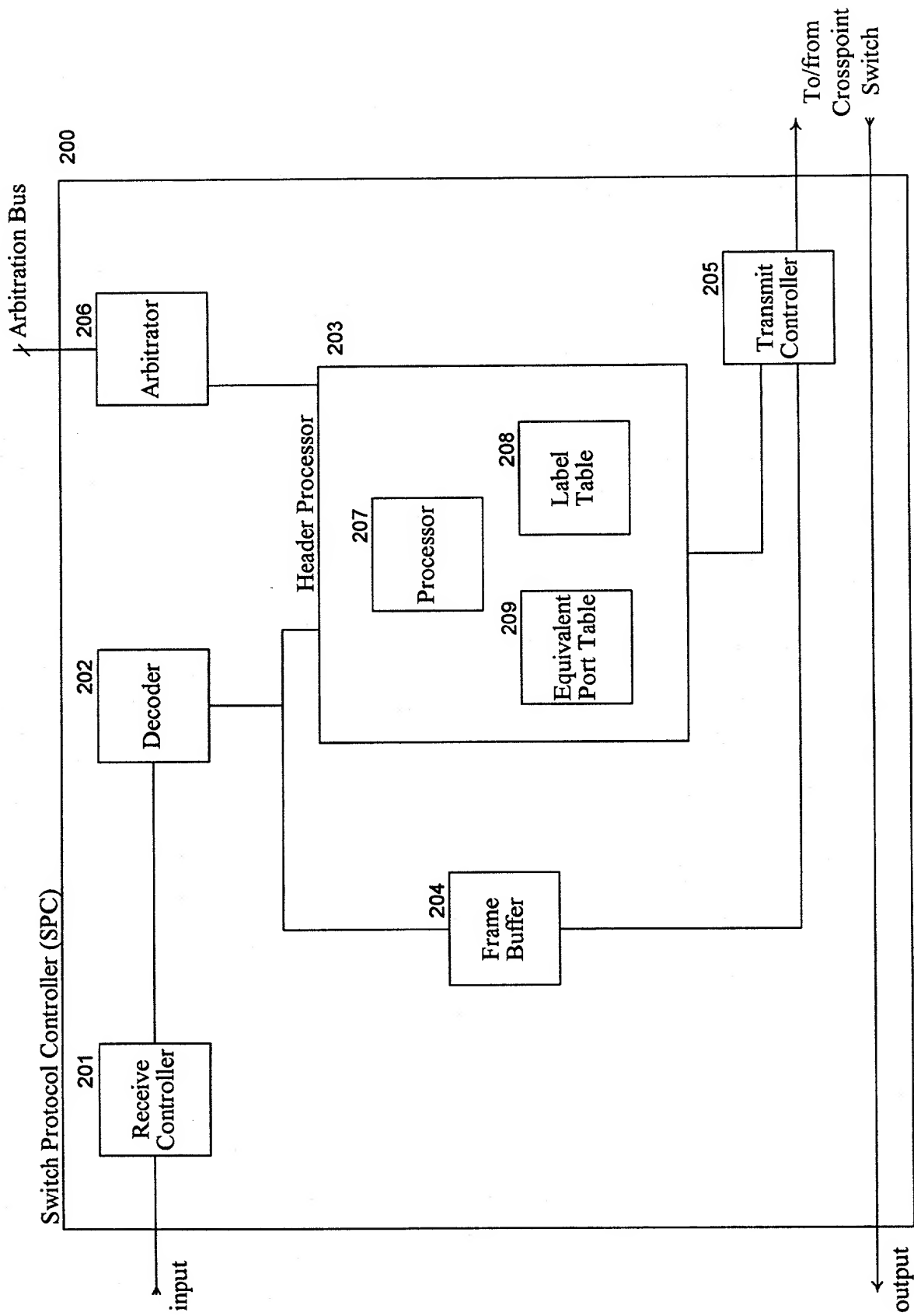


Fig. 2

Diagram illustrating a Label Table structure. The table is indexed by Port # (0, 1, 2, 3) and Virtual Address (0, ..., 8k). The first two rows show Port maps for Port # 0 and 1. The rest of the table is empty.

Port #	0	1	2	3
0	0	0	0	0
1	1	1	0	0
...				
8k	0	0	0	0

Fig. 3

Source: [illegible] Date: [illegible] Page: [illegible]

Frame

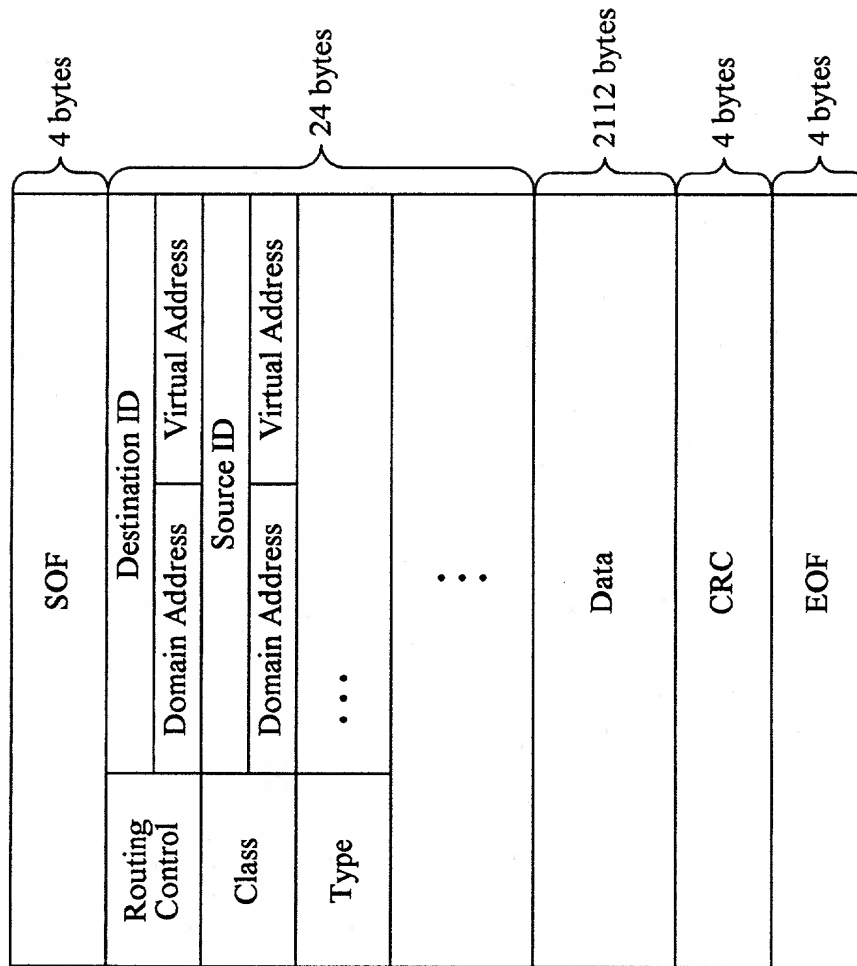


Fig. 4

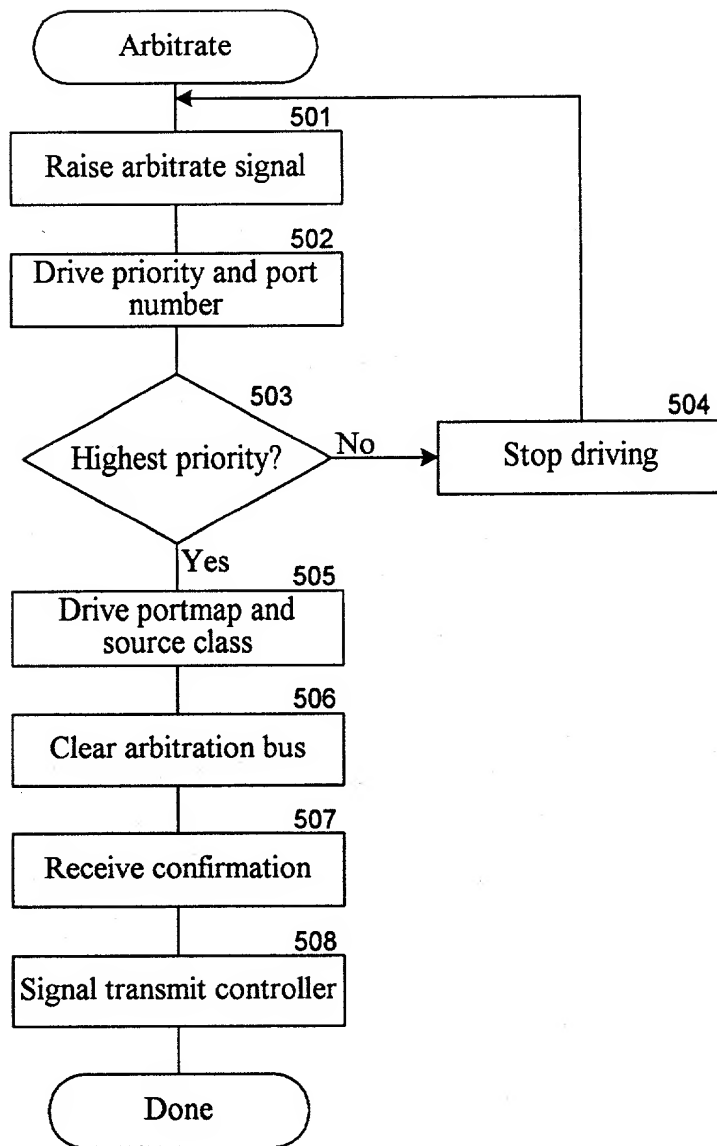


Fig. 5

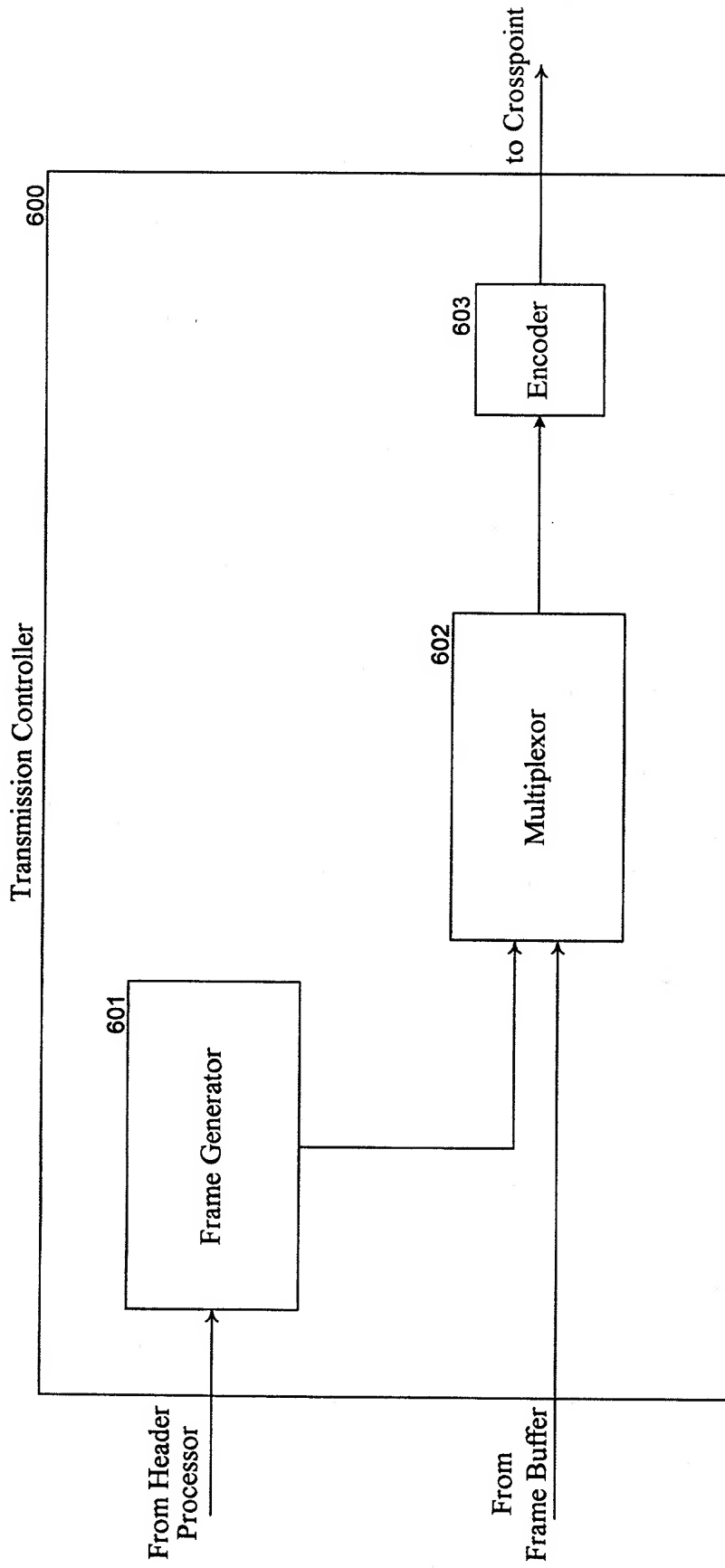


Fig. 6

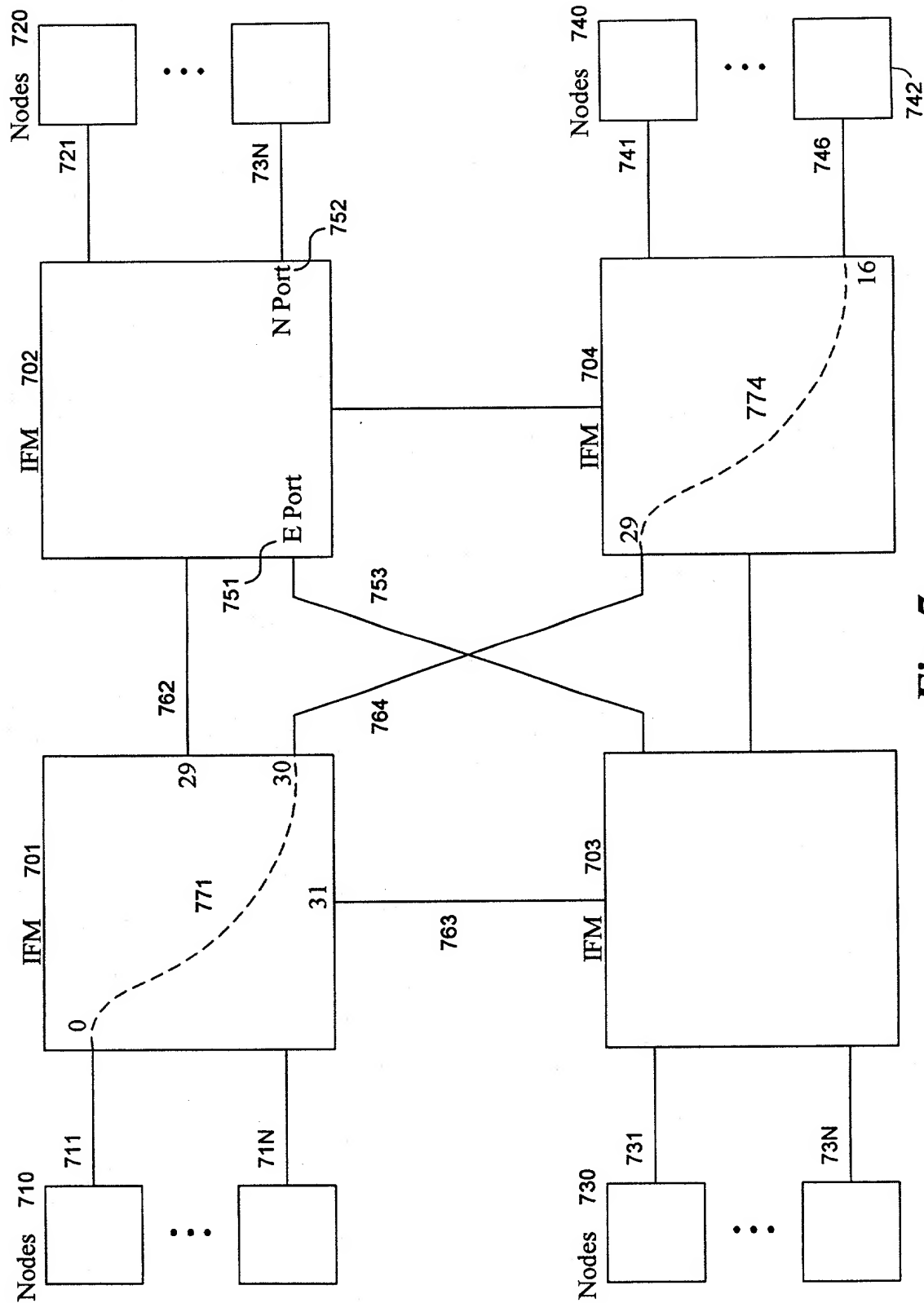


Fig. 7

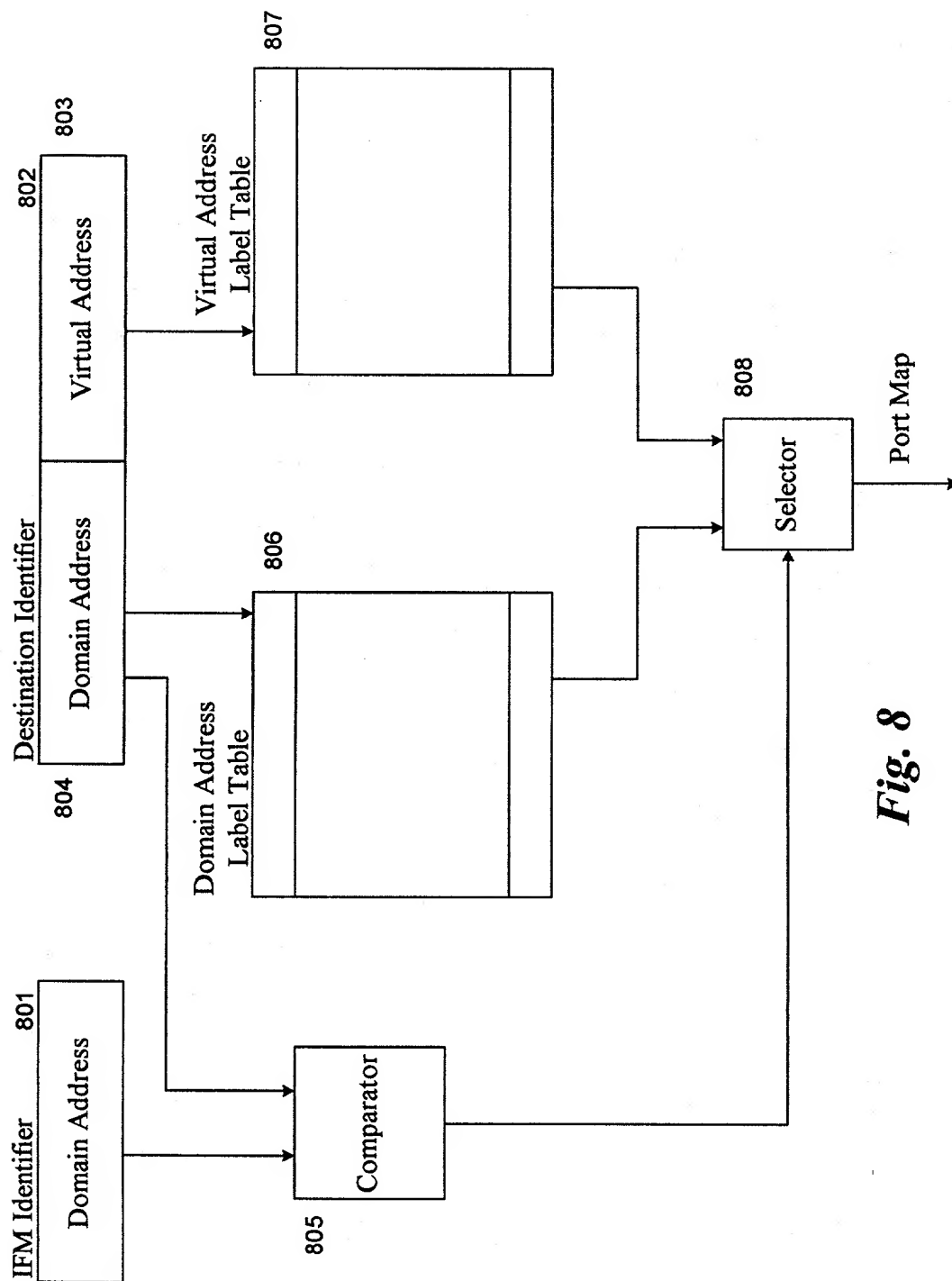


Fig. 8

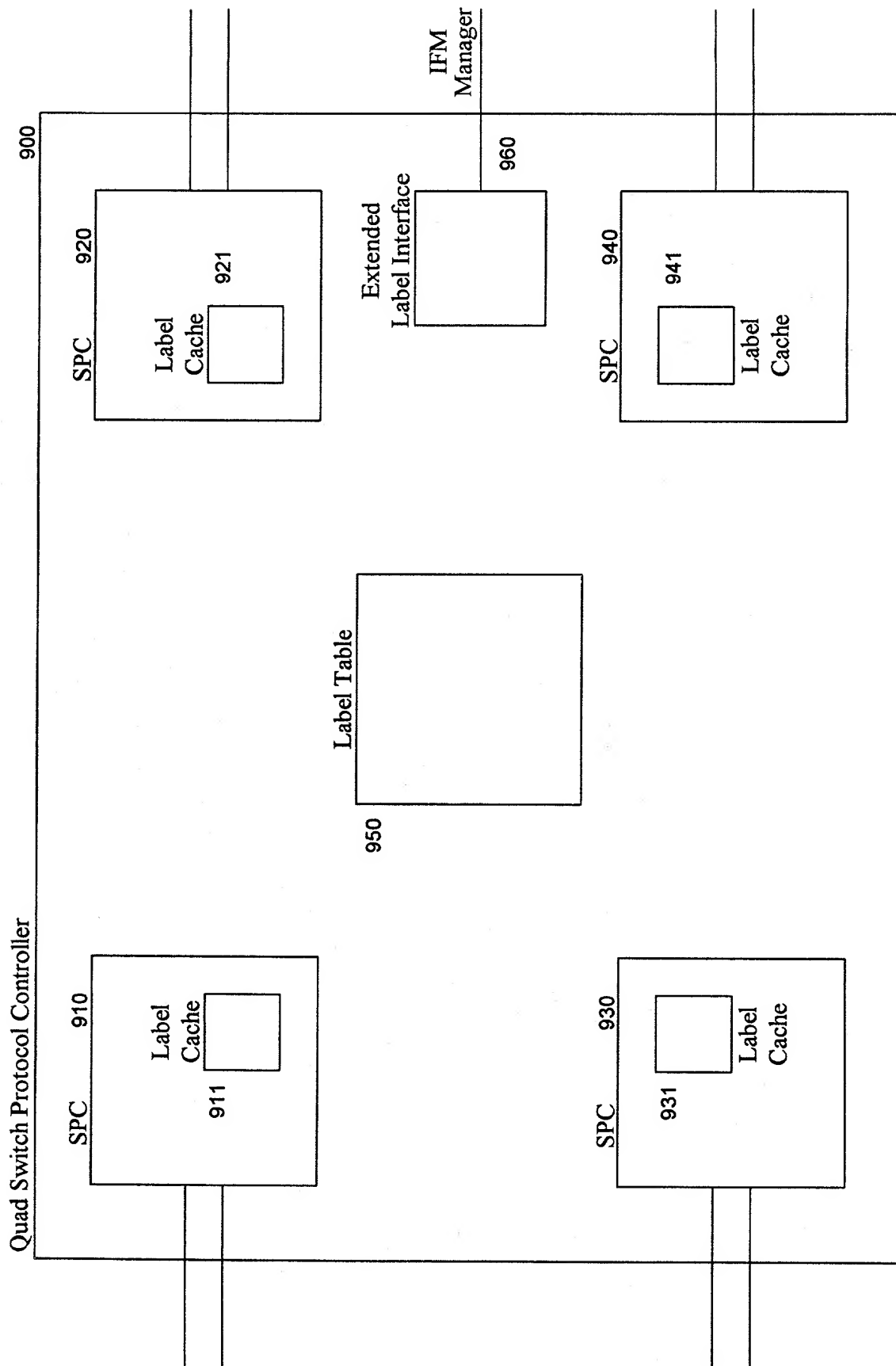


Fig. 9

1000

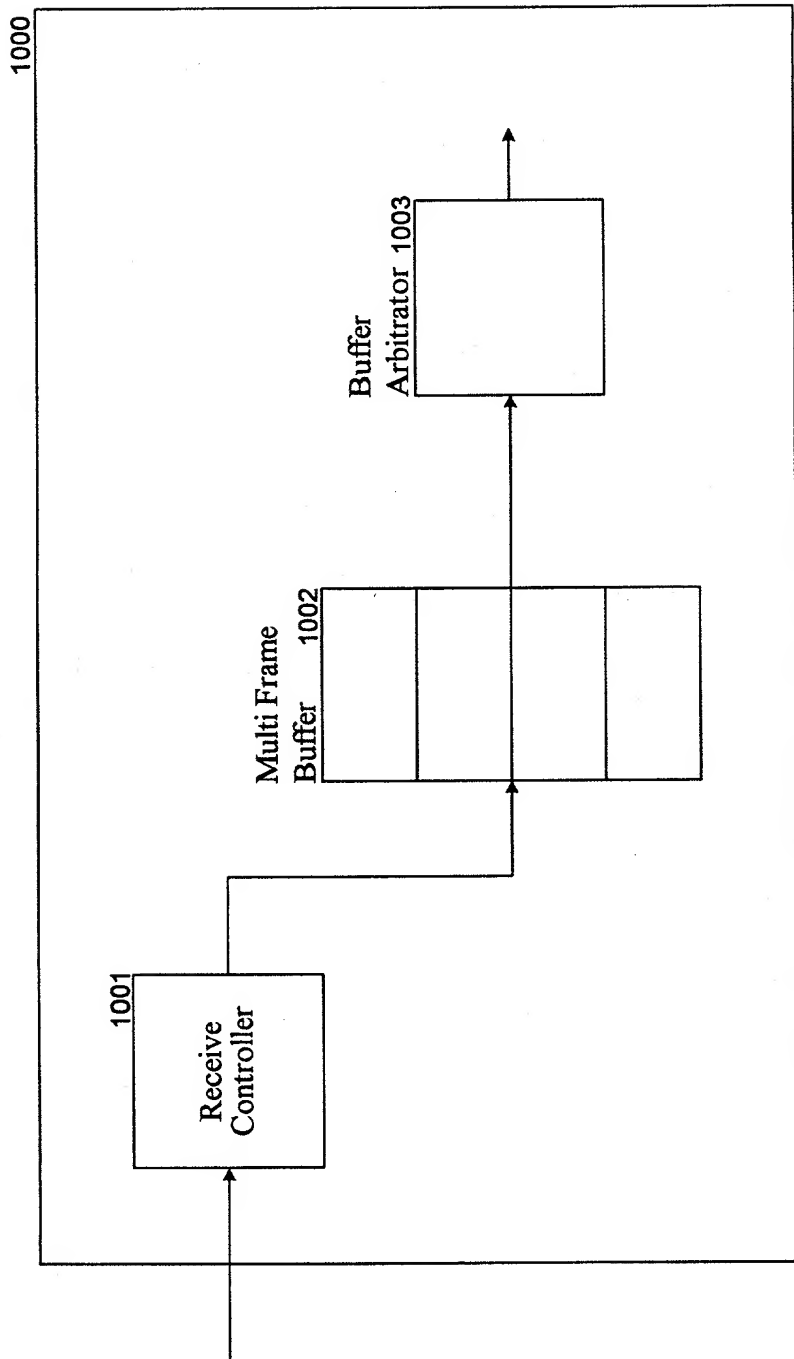


Fig. 10

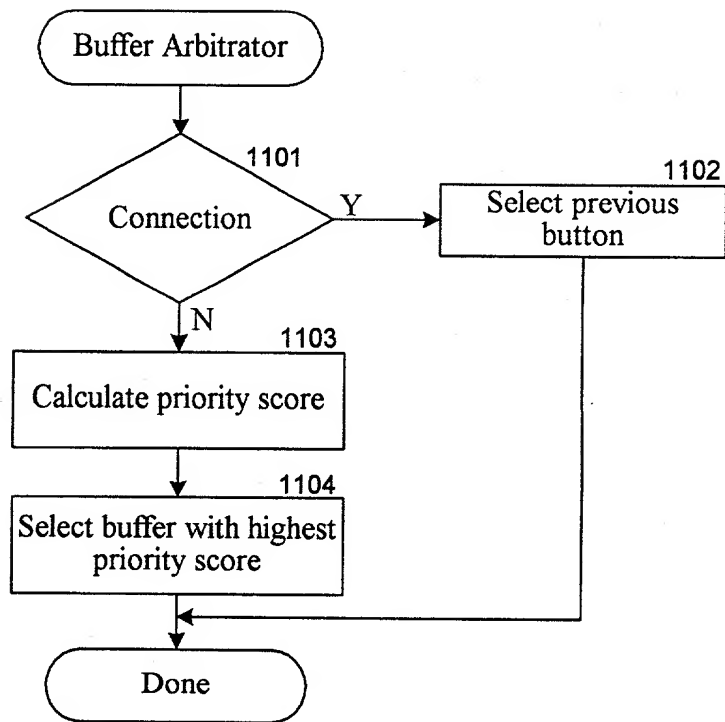


Fig. 11

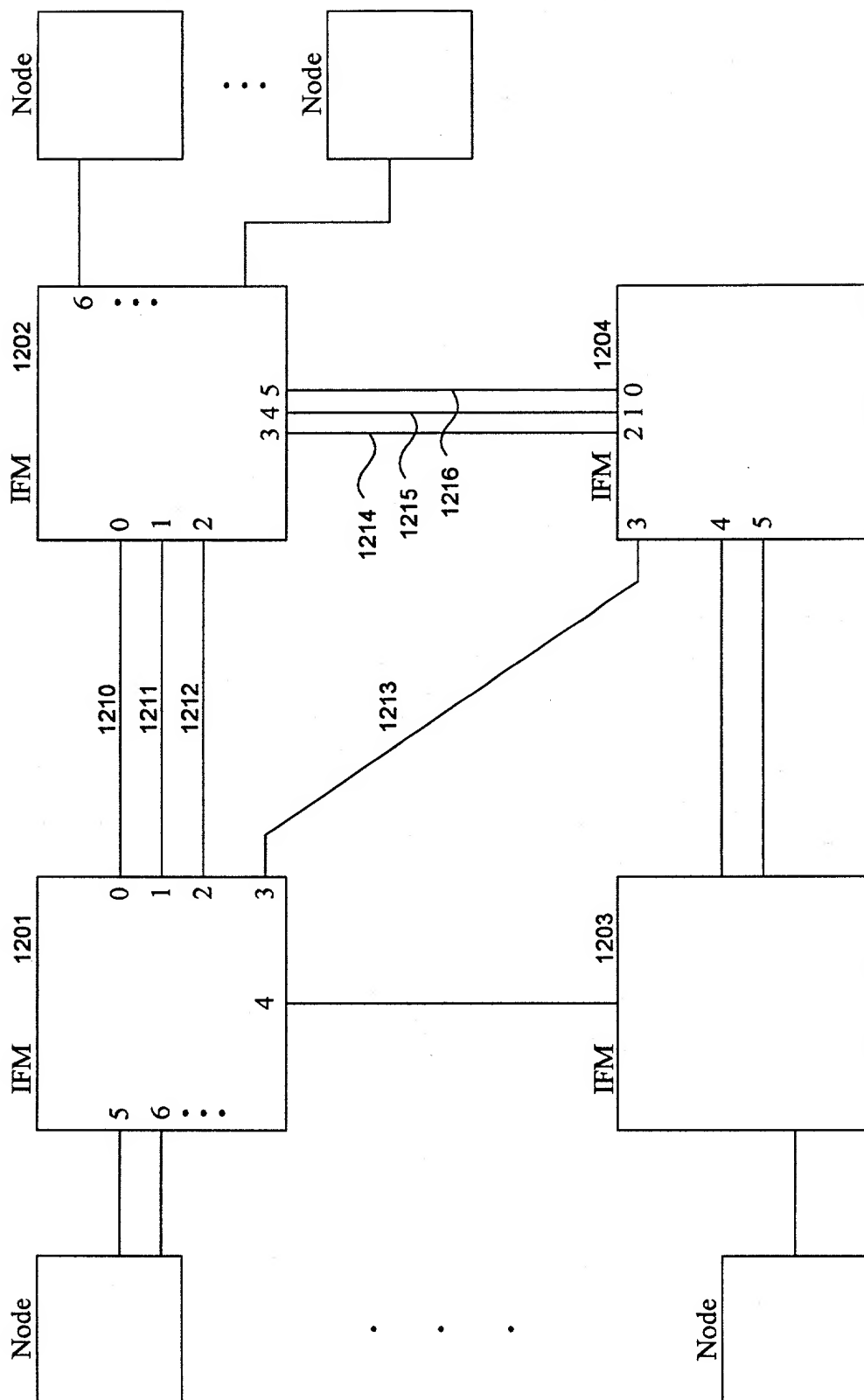


Fig. 12

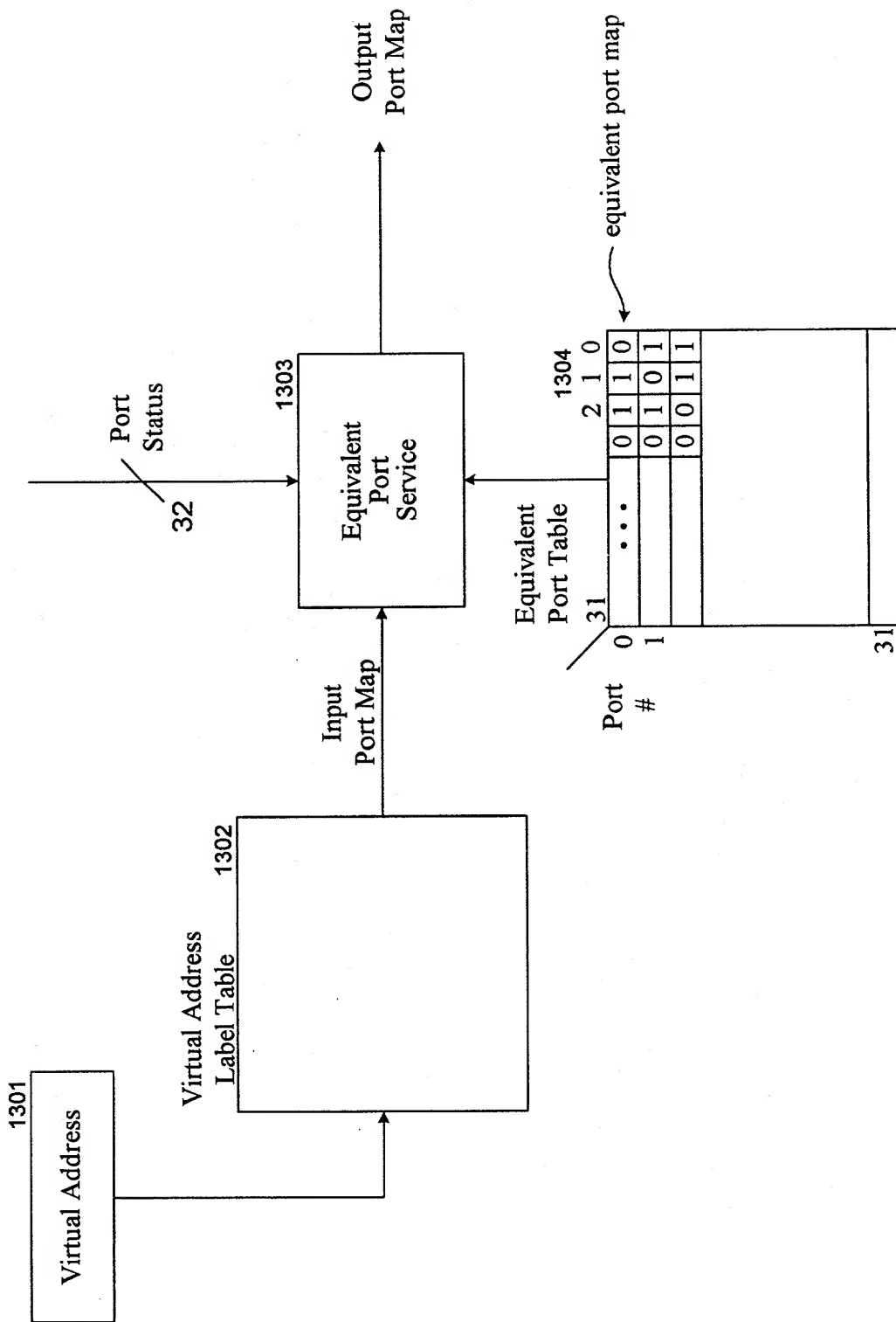


Fig. 13

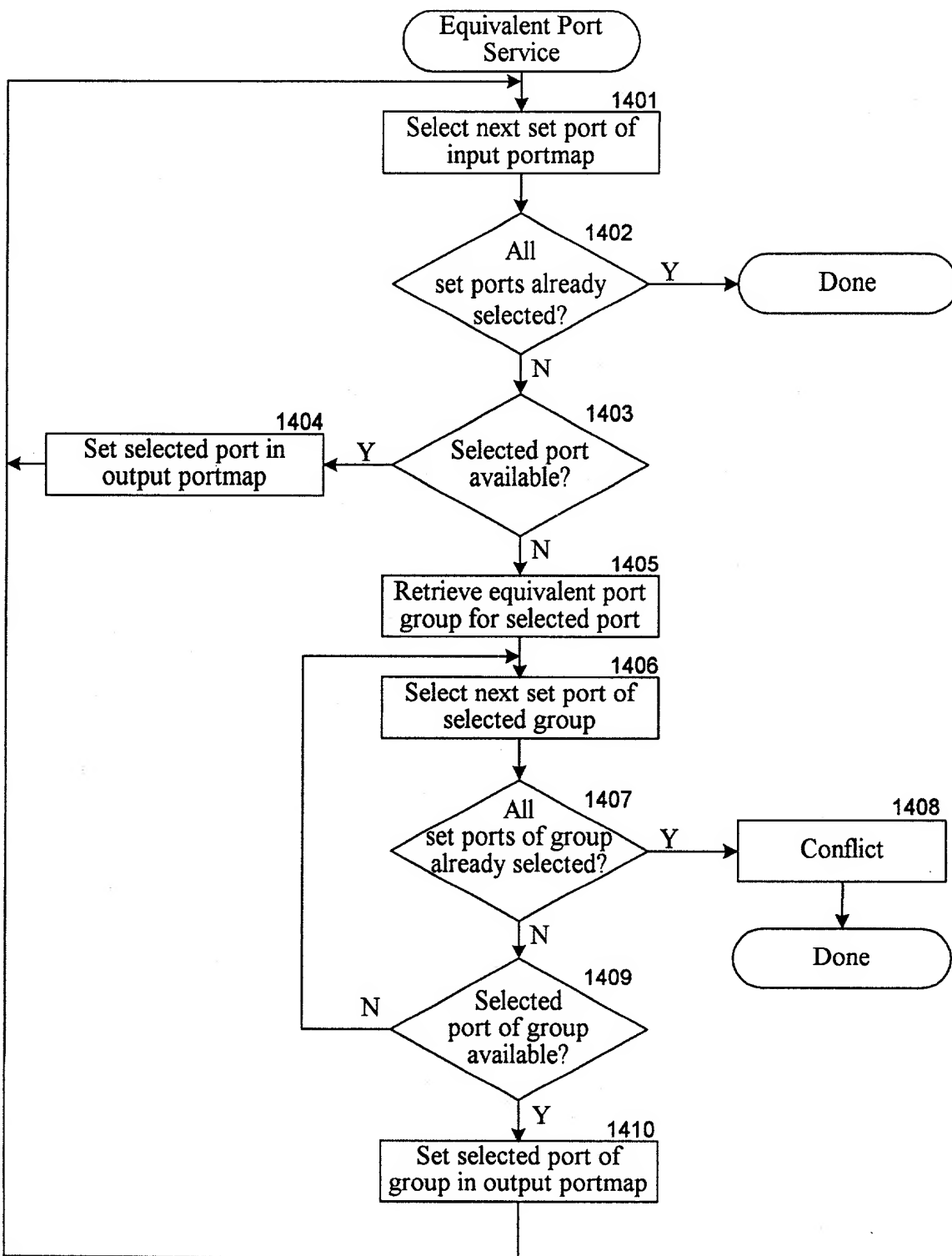


Fig. 14

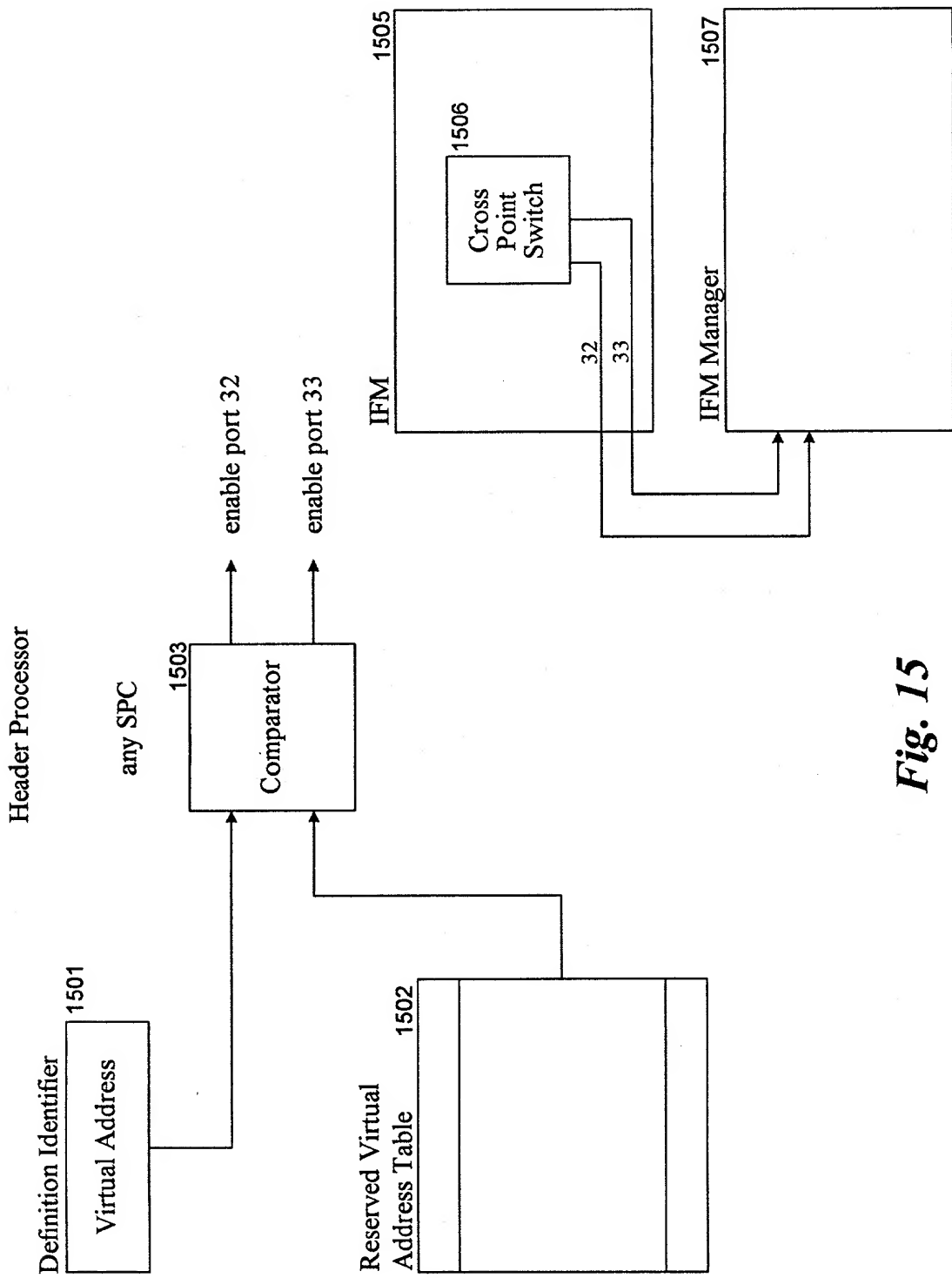
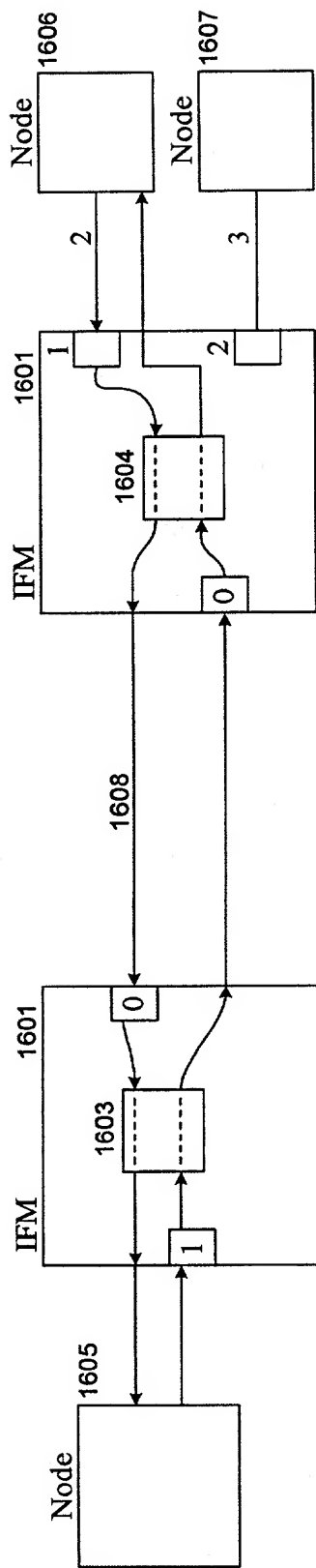


Fig. 15

FIG. 16 is a diagram illustrating a sequence of events in a system involving three nodes (Node 1605, Node 1606, and Node 1607) and two Intermediate Function Modules (IFM 1601 and IFM 1602). The diagram shows the flow of data and control signals between these components over time.



Deadlock

Time	Node 1605	IFM 1601	Node 1606	IFM 1602
0	Send start connect		Send start connect	
1		Connect 1↔0		Connect 2↔0
2		Forward start connect		Forward start connect
3		Can't forward start connect		Can't forward start connect
		Node 1		

Fig. 16

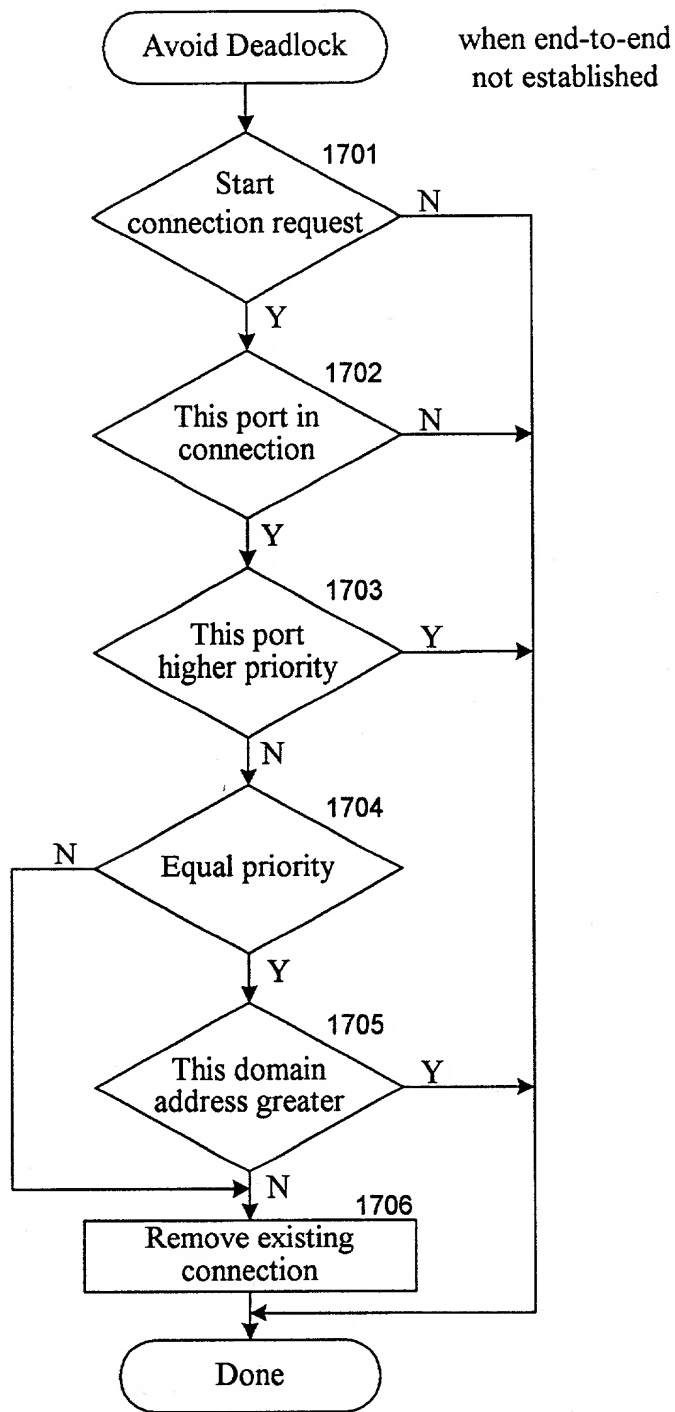


Fig. 17

FIG. 18 is a block diagram of a system 1800 illustrating a preemptive connection between two IFM blocks 1801 and 1802. Node 1803 is connected to block 1801 via line 1806. Block 1801 has ports 0, 1, and 2. Block 1802 has ports 4 and 6. Node 1804 is connected to block 1802 via line 1808. Block 1801 is connected to block 1802 via line 1807. Node 1805 is connected to port 2 of block 1801. An arrow labeled "Start connection (preempt port 1)" points to port 1 of block 1801.

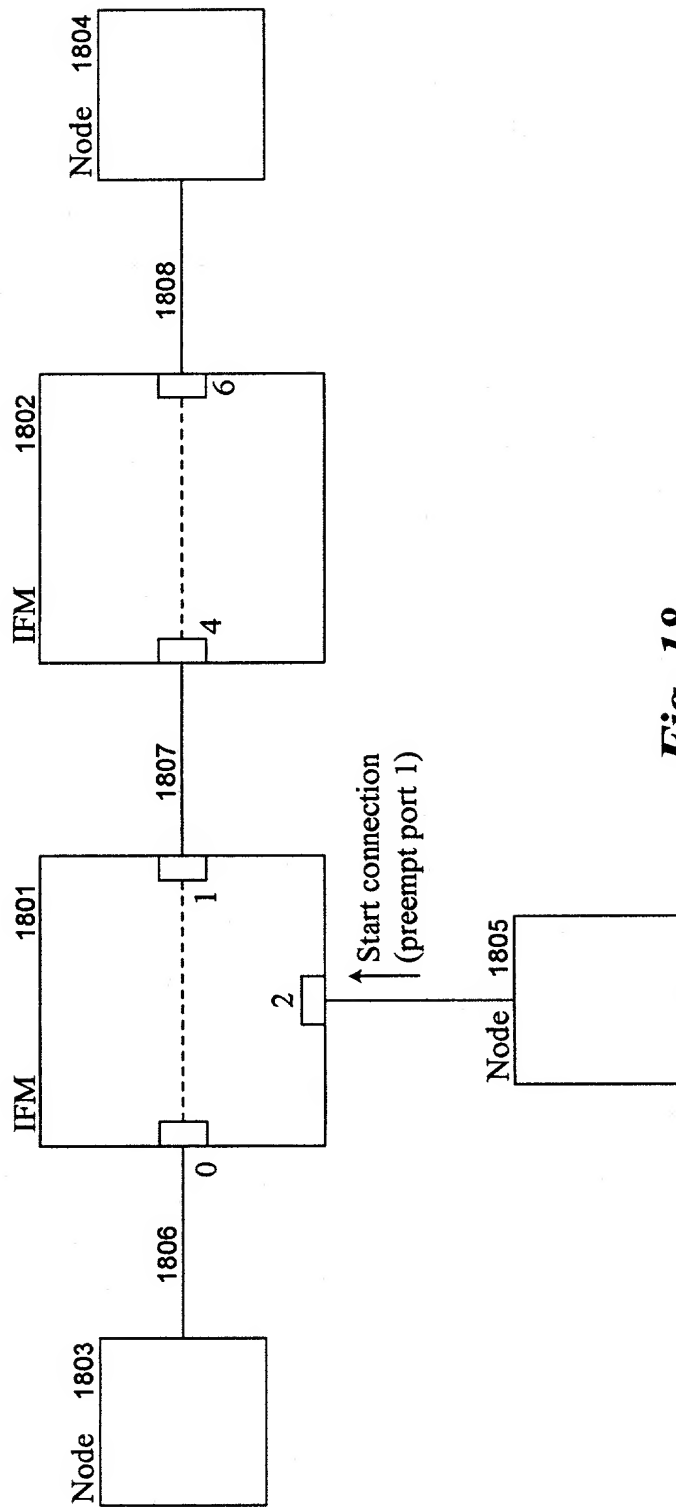


Fig. 18

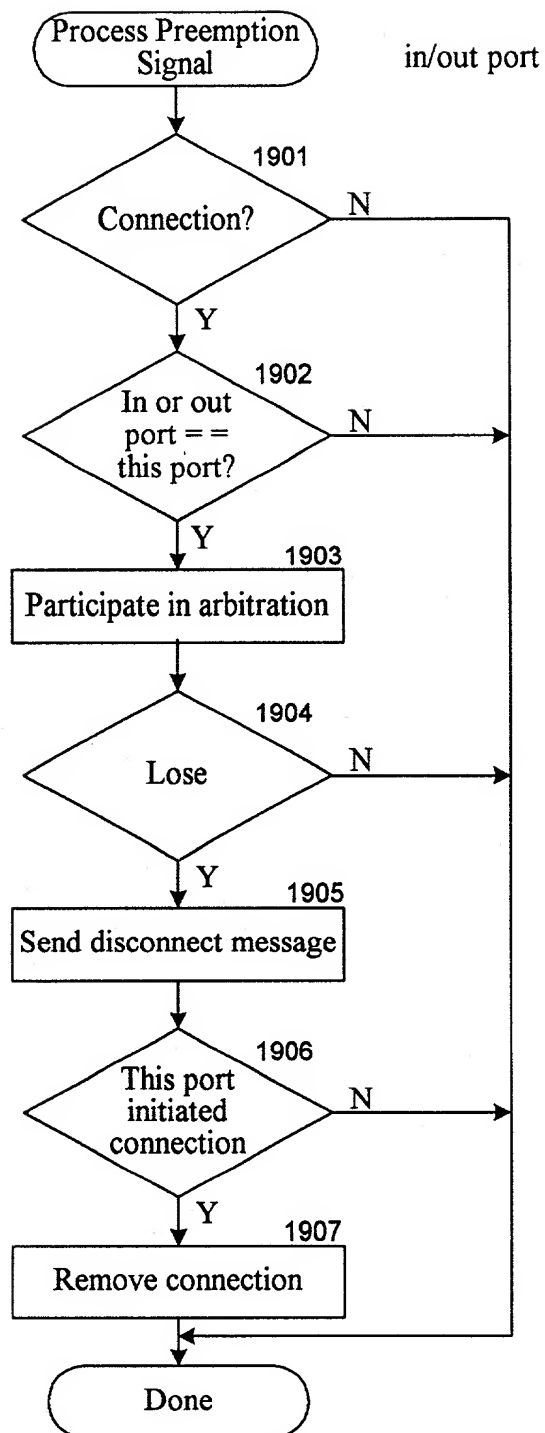


Fig. 19

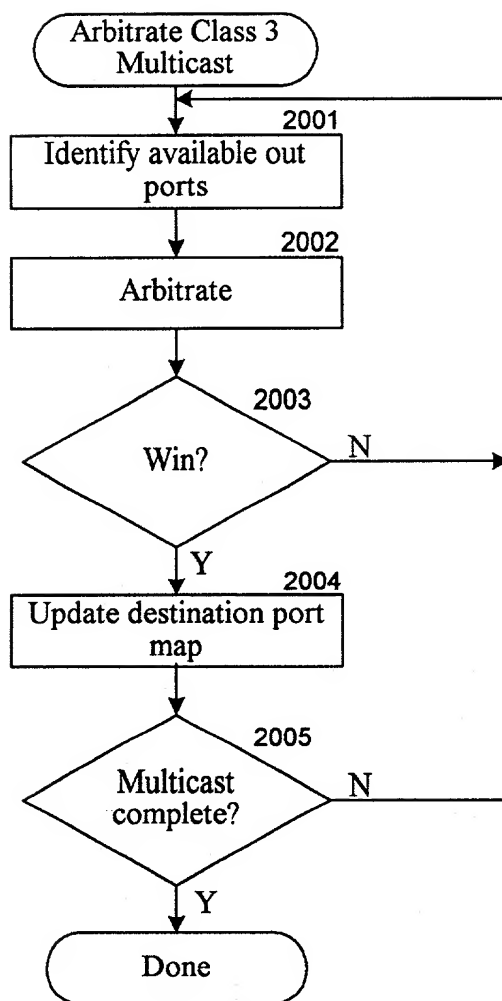


Fig. 20